

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1(Currently Amended). A protein expression vector comprising (a) a nucleotide sequence encoding an IgG(κ) or a trypsin secretory signal peptide, (b) a nucleotide sequence encoding a polyhistidine amino acid sequence, (c) a nucleotide sequence encoding ~~an amino acid sequence~~ a polypeptide comprising amino acid residues 36-40 of SEQ ID NO:19 (Asp-Asp-Asp-Asp-Lys), ~~which~~ wherein said polynucleotide is cleavable by an enterokinase, and (d) a cloning site into which a ~~nueleotide sequence~~ polynucleotide encoding a target protein can be inserted, wherein (a), (b), (c) and (d) are assembled within the vector in the order recited.

2(Currently amended). The protein expression vector according to claim 1, wherein a ~~nueleotide sequence~~ polynucleotide encoding a target protein is inserted in the cloning site (d).

3(Currently amended). The protein expression vector according to claim 1, wherein the cloning site or the

~~nucleotide sequence~~ polynucleotide encoding the target protein is present successively at the 3' end of the nucleotide sequence (c).

4 (Currently amended). The protein expression vector according to claim 1, wherein the expression vector further comprises a polynucleotide encoding at least one amino acid residue, wherein said polynucleotide is located between the 3' end of the ~~nucleotide sequence~~ polynucleotide encoding the IgG(κ) or the trypsin secretory signal peptide and the 5' end of the polynucleotide having the nucleotide sequence of (c).

5 (Currently amended). The protein expression vector according to claim 4, wherein the polynucleotide encoding at least one amino acid residue is a ~~nucleotide sequence~~ polynucleotide encoding an ~~amino acid sequence~~ a polypeptide comprising amino acid residues 24-29 of SEQ ID NO:19 (Leu-Val-His-Gly-Lys-Leu).

6 (Currently amended). The protein expression vector according to claim 4, wherein the polynucleotide encoding at least one amino acid residue ~~is composed of~~ comprises at least a nucleotide sequence encoding amino acids residues 36-40 of SEQ ID NO:19 (Asp-Asp-Asp-Asp-Lys).

Claims 7-11 (Cancelled).

12(Previously presented). The protein expression vector according to claim 1, further comprising a nucleotide sequence encoding an antibody recognition epitope.

13(Previously presented). The protein expression vector according to claim 2, wherein the nucleotide sequence encoding the target protein is that encoding neurosin.

14(Previously presented). A host cell transformed with the protein expression vector according to claim 2.

15(Previously presented). The host cell according to claim 14, wherein said cell is an animal cell.

16(Previously presented). The host cell according to claim 15, wherein said animal cell is a mammalian cell.

17(Previously presented). The host cell according to claim 15, wherein said animal cell is an insect cell.

18(Previously presented). A method for producing a target protein, wherein said method comprises cultivating a host cell transformed with the vector of claim 2.

Claim 19 (Cancelled).

20(Currently amended). A method for producing a recombinant fusion protein comprising ~~an amino acid sequence of a~~

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target protein, wherein said method comprises cultivating a host cell transformed with the vector of claim 2 to produce the recombinant fusion protein.

Claims 21-24 (Cancelled).

25(Previously presented). A method for producing a target protein, wherein said method comprises cultivating the host cell of claim 14 to produce the target protein.

Claim 26 (Cancelled).

27(Currently amended). A method for producing a recombinant fusion protein comprising ~~an amino acid sequence of~~ a target protein, wherein said method comprises cultivating the host cell of claim 14 to produce the recombinant fusion protein .

Claims 28 and 29 (Cancelled).

30(Previously presented). A host cell transformed with the protein expression vector of claim 1.